

Practice

For use with pages 280–284

Tell whether the ratios form a proportion.

1. $\frac{5}{12}, \frac{60}{144}$

2. $\frac{48}{90}, \frac{8}{15}$

3. $\frac{52}{16}, \frac{39}{10}$

4. $\frac{70}{28}, \frac{20}{8}$

5. $\frac{96}{120}, \frac{60}{85}$

6. $\frac{9}{6}, \frac{156}{104}$

7. $\frac{36}{48}, \frac{30}{40}$

8. $\frac{115}{85}, \frac{161}{136}$

Solve the proportion.

9. $\frac{14}{24} = \frac{21}{x}$

10. $\frac{32}{40} = \frac{x}{15}$

11. $\frac{9}{102} = \frac{12}{x}$

12. $\frac{28}{x} = \frac{8}{16}$

13. $\frac{8.4}{x} = \frac{8}{20}$

14. $\frac{14.6}{23} = \frac{x}{11.5}$

15. $\frac{18.3}{x} = \frac{6.1}{10}$

16. $\frac{40}{320} = \frac{14}{x}$

17. $\frac{12}{x} = \frac{0.4}{9}$

18. $\frac{3.5}{x} = \frac{49}{56}$

19. $\frac{0.2}{2.35} = \frac{4}{x}$

20. $\frac{6.02}{4} = \frac{x}{40}$

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Find the value of x .

21. $\frac{30}{48} = \frac{15}{x+9}$

22. $\frac{51}{x+11} = \frac{15}{5}$

23. $\frac{x-4}{42} = \frac{14}{84}$

24. $\frac{35}{20} = \frac{13-x}{28}$

25. $\frac{18}{50} = \frac{3x}{175}$

26. $\frac{22}{38} = \frac{33}{2x+7}$

27. In a batch of 120 manufactured machine parts, 3 are found to be defective. At this rate, how many machine parts would be defective in a batch of 12,000?

28. A post office sells first-class stamps and postcard stamps. For the year, the post office sold 7 first-class stamps for every 2 postcard stamps sold.

a. The post office sold 46,260 stamps for the year. How many of them were first-class stamps? How many were postcard stamps?

b. First-class stamps sold for \$.37 each. Postcard stamps sold for \$.23 each. Write a ratio for the amount of money collected for first-class stamps to the amount of money collected for postcard stamps.

c. Is the ratio you wrote in part (b) proportional to the ratio of first-class stamps sold to postcard stamps sold?